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DR-524
May 1970

AD

21

METEOROLOGICAL DATA REPORT

AF03702 HONEST JOHN
MISSILE NO. 620, ROUND NO. 602 AML
(6 May 1970)

BY

METEOROLOGICAL SUPPORT TECHNICAL AREA

ATMOSPHERIC SCIENCES OFFICE
WHITE SANDS MISSILE RANGE, NEW MEXICO

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METEOROLOGICAL DATA REPORT

**AF03702 HONEST JOHN
MISSILE NO. 620, ROUND NO. 602 AML
(6 May 1970)**

By

Meteorological Support Technical Area

DR-524

May 1970

DA Task 1T665702D127-02

**ATMOSPHERIC SCIENCES OFFICE
WHITE SANDS MISSILE RANGE, NEW MEXICO**

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ABSTRACT

Meteorological data gathered for the launching of AF03702 Honest John, Missile Number 620, Round Number 602 AML, are presented in tabular form.

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INTRODUCTION

AF03702 Honest John, Missile Number 620, Round Number 602 AML, was launched from CP-7, White Sands Missile Range (WSMR), New Mexico, at 0715 MDT, 6 May 1970. The scheduled launch time was 0715 MDT.

DISCUSSION

Meteorological data were recorded and reduced by the Meteorological Support Technical Area, Atmospheric Sciences Office (ASO), WSMR, New Mexico. The data are presented in the following tabulations.

ELEVATION	4,840	FEET/MSL
PRESSURE	854.6	MBS
TEMPERATURE	11.4	°C
RELATIVE HUMIDITY	41	%
DEW POINT	-1.4	°C
DENSITY	1,047	GM/M ³

TABLE I. SURFACE OBSERVATIONS TAKEN AT 0715 MDT/
6 MAY 1970, AT CP-7.

INTRODUCTION

AF03702 Honest John, Missile Number 620, Round Number 602 AML, was launched from CP-7, White Sands Missile Range (WSMR), New Mexico, at 0715 MDT, 6 May 1970. The scheduled launch time was 0715 MDT.

DISCUSSION

Meteorological data were recorded and reduced by the Meteorological Support Technical Area, Atmospheric Sciences Office (ASO), WSMR, New Mexico. The data are presented in the following tabulations.

ELEVATION

PRESSURE	859.0	MBS
----------	-------	-----

TEMPERATURE	16.7	°C
-------------	------	----

RELATIVE HUMIDITY	30.0	%
-------------------	------	---

DEW POINT	-1.1	°C
-----------	------	----

DENSITY		GM/M ³
---------	--	-------------------

TABLE II. SURFACE OBSERVATIONS TAKEN AT 0730 MDT/
6 MAY 1970, AT AFSWC TGT #1.

HEIGHT (Feet)	DIRECTION (Degrees)	SPEED (MPH)
SUR	171	7.0
100	156	5.0
200	136	4.5
300	125	4.5
400	132	5.5
500	153	7.0
600	163	9.5
700	166	10.0
800	171	12.0
900	175	13.0
1000	180	14.5
1100	176	16.0
1200	173	17.0
1300	169	19.5
1400	169	21.0
1500	167	23.0

HEIGHT (Feet)	DIRECTION (Degrees)	SPEED (MPH)
1600	169	25.5
1700	168	27.5
1800	169	30.5
1900	171	34.0
2000	168	37.0
2100	167	37.0
2200	167	40.0
2300	167	40.0
2400	166	39.0
2500	166	37.0
2600	167	38.5
2700	167	38.5
2800	169	36.0
2900	170	36.5
3000	171	37.0

TABLE III. PILOT-BALLOON-MEASURED WIND DATA, RELEASE NO. 1
RELEASED FROM CP-7, AT 0714:30 MDT/6 MAY 1970
AF03702 HONEST JOHN, MISSILE NO. 620, ROUND NO. 602 AML

PIBAL RELEASE POINT WITH COORDINATES:

X = 406,122.94 Y = 693,918.11 Z = 4,844.64

APPROXIMATELY: ONE TENTH (1/10) MILE NORTH OF LAUNCHER

NOTE: WIND DIRECTION DATA ARE REFERENCED 167.0°

HEIGHT (Feet)	DIRECTION (Degrees)	SPEED (MPH)
SUR	118	4.0
500	053	8.0
1000	017	9.0
1500	010	11.0
2000	005	11.0
2500	007	14.0
3000	007	16.0
3500	007	20.0
4000	008	20.0
4500	011	21.0
5000	010	21.0
5500	017	19.0
6000	030	16.0
6500	031	15.0
7000	031	16.0
7500	038	12.0
8000	038	15.0

TABLE IV. PILOT-BALLOON-MEASURED WIND DATA, RELEASE NO. 1
RELEASED FROM CP-17, AT 0645 MDT/6 MAY 1970
AF03702 HONEST JOHN, MISSILE NO. 620, ROUND NO. 602 AML

PIBAL RELEASE POINT WSTM COORDINATES:

X = 413,576.24 Y = 665,015.33 Z = 4,746.53

APPROXIMATELY: 5 MILES SOUTH OF LAUNCHER

NOTE: WIND DIRECTION DATA ARE REFERENCED 167.0°

HEIGHT (Feet)	DIRECTION (Degrees)	SPEED (MPH)	HEIGHT (Feet)	DIRECTION (Degrees)	SPEED (MPH)
SUR	CALM	0.0	2100	170	18.0
100	180	2.0	2200	170	18.0
200	180	4.0	2300	170	18.0
300	180	5.0	2400	170	19.0
400	180	6.0	2500	170	19.0
500	180	8.0	2600	170	19.0
600	180	10.0	2700	170	19.0
700	180	11.0	2800	175	19.0
800	175	11.0	2900	180	19.0
900	175	10.0	3000	185	19.0
1000	175	10.0	3100		
1100	170	10.0	3200		
1200	170	10.0	3300		
1300	165	11.0	3400		
1400	165	13.0	3500	200	22.0
1500	165	15.0	3600		
1600	165	17.0	3700		
1700	170	18.0	3800		
1800	170	18.0	3900		
1900	170	18.0	4000	200	23.0
2000	170	18.0	4100		

TABLE V. PILOT-BALLOON-MEASURED WIND DATA, RELEASE NO. 38
RELEASED FROM AFSWC TGT #1, AT 0730 MDT/6 MAY 1970
AF03702 HONEST JOHN, MISSILE NO. 620, ROUND NO. 602 AML

PIBAL RELEASE POINT WTM COORDINATES:

X = 424,568.33 Y = 638,753.98 EL = 4,694.33 FT.

APPROXIMATELY: 5 MILES SOUTHEAST OF LAUNCHER

NOTE: WIND DIRECTION DATA ARE REFERENCED 360° TRUE NORTH.

HEIGHT (Feet)	DIRECTION (Degrees)	SPEED (MPH)	HEIGHT (Feet)	DIRECTION (Degrees)	SPEED (MPH)
4200			6600		
4300			6700		
4400			6800		
4500	195	26.0	6900		
4600			7000	190	30.0
4700			7100		
4800			7200		
4900			7300		
5000	190	27.0	7400		
5100			7500	195	36.0
5200			7600		
5300			7700		
5400			7800		
5500	195	17.0	7900		
5600			8000	195	37.0
5700			8100		
5800			8200		
5900			8300		
6000	200	27.0	8400		
6100			8500		
6200			8600		
6300			8700		
6400			8800		
6500	200	29.0	8900		

TABLE V. (CONT)

NOTE: WIND DIRECTION DATA ARE REFERENCED 360° TRUE NORTH.

STATION ALTITUDE 4040.00 FEET MSL
 4 MAY 70 0345 PRS MDT
 ASCENSION NC. 224

SIGNIFICANT LEVEL DATA
 1060040224
 STALLION

WSTM SJTF COORDINATES
 402783.00 FEET F
 701403.00 FEET N

TABLE VI

PRESSURE GEOMETRIC ALTITUDE	TEMPERATURE		REL. HUM. PERCENT
	AIR DEGREES	DEWPOINT CENTIGRADE	
MILLIBARS MSL FEET			
851.5 4940.0	10.5	-2.2	41.0
842.0 5250.6	17.7	-3.7	23.0
801.0 6645.8	16.0	-4.6	24.0
755.0 8137.9	12.6	-6.9	25.0
725.0 9395.6	10.6	-8.1	26.0
645.0 12541.1	1.5	-13.8	31.0

STATION ALTITUDE 4540.00 FEET MSL
 4 MAY 70 0345 PRS NOT
 ASCENSION NO. 224

UPPER AIR DATA
 1260040224
 STALLION

WSTM SITE COORDINATES
 403783.00 FEET E
 701403.00 FEET N

TABLE VII

GEOPHYSIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL-HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNCTS	WIND DATA		INDEX OF REFRACTION
						DIRECTION DEGREES(TN)	SPEED KNOTS	
4540.0	851.5	10.5	41.0	1043.5	656.5	0.	0.	1.000257
5000.0	849.7	11.5	37.5	1036.2	658.2	355.6	0.5	1.000255
5500.0	834.5	17.4	23.2	998.7	664.4	318.5	4.8	1.000243
6000.0	819.7	16.8	23.5	983.0	663.7	281.4	9.1	1.000239
6500.0	805.2	16.2	23.5	967.6	663.0	244.4	13.3	1.000235
7000.0	790.8	15.2	24.2	953.7	661.9	207.3	17.6	1.000232
7500.0	776.7	14.1	24.6	940.4	660.5	193.9	19.7	1.000228
8000.0	762.8	12.5	24.5	927.3	659.2	196.6	20.4	1.000224
8500.0	749.1	12.0	25.3	913.5	658.1	199.3	21.6	1.000220
9000.0	735.5	11.2	25.7	899.6	657.2	201.6	23.9	1.000216
9500.0	722.2	10.3	26.2	886.2	656.1	204.0	24.8	1.000213
10000.0	708.5	8.9	27.0	874.4	654.4	206.6	22.8	1.000209
10500.0	695.8	7.4	27.8	862.8	652.7			1.000206
11000.0	682.0	6.0	28.6	851.4	651.0			1.000203
11500.0	670.5	4.5	29.3	840.1	649.3			1.000199
12000.0	658.1	3.1	30.1	829.0	647.6			1.000196
12500.0	646.0	1.6	30.5	818.1	645.8			1.000193

STATION ALTITUDE 4540.00 FEET MSL
 6 MAY 70 0345 PRS MDT
 ASCAFASICA NC. 224

MANDATORY LEVELS
 1260040224
 STALLION

WSTM SITE COORDINATES
 402783.00 FEET E
 701403.00 FEET N

TABLE VIII

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM.		WIND DATA	
MILLIBARS	FEET	AIR DEGREES	DEWPOINT CENTIGRADE	PERCENT		DIRECTION DEGREES(TN)	SPEED KNOTS
650.0	4567.	11.6	-2.1	38.		356.4	0.4
800.0	6678.	15.9	-4.6	24.		231.0	14.9
750.0	8462.	12.1	-7.2	25.		199.1	21.4
700.0	10344.	7.9	-9.8	28.			
650.0	12326.	2.1	-13.4	31.			

STATION ALTITUDE 4940.00 FEET MSL
6 MAY 76 0645 PMS MDT
ASCENSION NC. 225

SIGNIFICANT LEVEL DATA
1260040225
STALLION

WSTM SITE COORDINATES
402782.00 FEET E
701403.00 FEET N

TABLE IX

PRESSURE GEOMETRIC ALTITUDE		TEMPERATURE		REL. HUM. PERCENT
MILLIBARS	MSL FEET	AIR DEGREES	DEWPCINT CENTIGRADE	
891.3	4940.0	5.0	-3.9	40.0
839.0	5340.8	16.1	-2.4	28.0
766.0	7867.5	13.6	-6.1	25.0
730.0	9191.2	10.7	-7.1	28.0
575.0	15345.6	-5.8	-15.4	47.0
546.0	16848.8	-8.8	-26.3	23.0
543.0	16989.1	-8.9	-21.0	37.0
536.0	17319.6	-8.7	-30.1	16.0
461.0	21054.6	-17.6	-31.1	30.0
418.0	23471.7	-24.8	-33.2	46.0
408.0	24050.4	-25.6	-33.3	49.0
393.0	24941.8	-26.8	-43.6	19.0
378.0	25864.4	-27.5	-44.7	18.0
332.0	28885.8	-35.6	-45.5	36.0
312.0	30257.3	-39.4	-45.9	51.0
292.0	31776.9	-43.0	-45.6	49.0
238.0	36203.5	-54.5		
202.0	39457.8	-62.4		
188.0	41054.8	-63.5		
170.0	43051.1	-63.5		
166.0	43571.9	-64.4		
141.0	48861.0	-64.4		
134.0	47882.8	-66.3		
126.0	49122.5	-62.5		
102.0	52405.2	-63.7		
86.0	56852.5	-64.4		
83.0	57573.0	-62.0		
71.0	60735.0	-64.8		
68.0	61616.4	-61.1		
62.0	63510.5	-61.1		

WSTM SITE COORDINATES
402703.00 FEET F
701403.00 FEET N

SIGNIFICANT LEVEL DATA

1260040225

STALLION

TABLE IX (Cont)

STATION ALTITUDE 4540.00 FEET MSL
6 MAY 70 0645 PRS MDT
ASCENSION NC. 225

PRESSURE GEOMETRIC ALTITUDE MILLIBARS MSL FEET	TEMPERATURE		REL. HUM. PERCENT
	AIR DEGREES	DEWPOINT CENTIGRADE	
48.0 68790.2	-58.6		
39.0 73131.0	-55.6		
37.0 74236.4	-56.1		
29.0 79419.0	-50.9		
26.0 81766.7	-47.7		
21.0 86501.3	-42.9		
20.0 87588.5	-43.6		
18.0 89951.8	-39.9		
17.0 91255.0	-36.1		
16.0 92642.4	-38.2		
14.0 95708.2	-34.6		
12.5 98306.8	-39.0		
9.2 105287.6	-37.9		

STATION ALTITUDE 4940.00 FEET MSL
6 MAY 70 0645 MRS MDT
ASCENSION NO. 225

UPPER AIR DATA
1260040225
STALLION

WSTM SITE COORDINATES
403783.00 FEET E
701403.00 FEET N

TABLE X

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SCUND KNOTS	WIND DATA DIRECTION DEGREES(TN) SPEED KNOTS	INDEX OF REFRACTION
4940.0	851.3	9.6	40.0	1049.1	654.7	350.0	1.000256
5000.0	849.4	10.1	38.2	1042.8	656.0	347.1	1.000255
5500.0	834.2	15.5	27.8	1009.1	662.8	322.5	1.000246
6000.0	819.3	15.4	27.2	987.0	662.2	297.9	1.000242
6500.0	804.7	15.0	26.6	971.1	661.6	273.3	1.000237
7000.0	790.3	14.5	26.0	955.5	661.0	248.8	1.000232
7500.0	776.2	14.0	25.4	940.1	660.4	224.2	1.000228
8000.0	762.3	13.3	25.3	925.4	659.7	199.6	1.000224
8500.0	748.6	12.2	26.4	912.3	658.4	197.6	1.000221
9000.0	735.1	11.1	27.6	899.3	657.1	199.4	1.000217
9500.0	721.6	9.9	29.0	886.6	655.7	199.7	1.000214
10000.0	708.1	8.5	30.5	874.3	654.1	199.7	1.000211
10500.0	694.5	7.2	32.0	862.1	652.5	199.3	1.000208
11000.0	681.5	5.9	33.6	850.1	650.9	197.7	1.000205
11500.0	669.2	4.5	35.1	838.4	649.4	195.7	1.000201
12000.0	656.7	3.2	36.7	826.8	647.8	193.7	1.000198
12500.0	644.5	1.8	38.2	815.3	646.2	192.0	1.000195
13000.0	632.5	0.5	39.8	804.1	644.6	190.9	1.000192
13500.0	620.7	-0.9	41.3	793.0	643.0	192.2	1.000189
14000.0	609.1	-2.2	42.8	782.1	641.4	195.1	1.000186
14500.0	597.7	-3.5	44.4	771.4	639.8	200.3	1.000183
15000.0	586.6	-4.9	45.9	760.9	638.2	206.2	1.000180
15500.0	575.3	-6.1	46.5	750.0	636.7	213.4	1.000176
16000.0	564.4	-7.1	46.6	738.5	635.4	218.9	1.000171
16500.0	553.5	-8.1	46.6	727.1	634.1	223.3	1.000167
17000.0	542.8	-8.9	46.3	715.1	633.2	226.6	1.000165
17500.0	532.2	-9.1	46.7	702.0	632.8	229.6	1.000159
18000.0	521.6	-10.3	46.5	691.2	631.4	232.5	1.000157
18500.0	511.3	-11.5	46.4	680.6	630.0	235.2	1.000154
19000.0	501.2	-12.7	46.2	670.1	628.6	237.6	1.000152

XX WIND DATA MAY BE INVALID DUE TO MISSING FAN AZIMUTH AND ELEVATION ANGLES.

UPPER AIR DATA
126040225
STALLION

STATION ALTITUDE 4540.00 FEET MSL
6 MAY 70 0645 PRS MDT
ASPERSEN NC. 225

WSTM SITE COORDINATES
402783.00 FEET E
701403.00 FEET N

TABLE X (Cont)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
19500.0	491.3	-12.6	24.1	659.9	627.1	240.2	22.8	1.000150
20000.0	481.6	-15.0	25.5	649.8	625.7	243.1	23.0	1.000148
20500.0	472.1	-16.2	27.8	639.9	624.3	245.1	23.1	1.000145
21000.0	462.7	-17.4	29.6	630.1	622.8	246.7	23.2	1.000143
21500.0	453.4	-18.8	32.7	620.9	621.1	247.0	23.3	1.000141
22000.0	444.1	-20.3	36.1	611.9	619.2	246.8	23.9	1.000139
22500.0	435.1	-21.5	39.5	603.0	617.4	245.1	25.9	1.000137
23000.0	426.2	-23.4	42.8	594.3	615.5	242.8	28.9	1.000135
23500.0	417.5	-24.8	46.1	585.6	613.7	240.2	32.4	1.000133
24000.0	408.5	-25.5	48.7	575.1	612.8	241.1	35.1	1.000130
24500.0	400.4	-26.2	33.9	564.7	612.0	242.2	36.5	1.000127
25000.0	392.0	-26.8	18.5	554.5	611.1	243.7	35.9	1.000124
25500.0	383.5	-27.2	18.4	543.8	610.7	245.1	35.8	1.000122
26000.0	375.8	-27.5	18.8	533.7	609.9	246.4	35.5	1.000120
26500.0	367.8	-29.2	21.8	525.3	608.2	246.9	35.2	1.000118
27000.0	360.0	-30.5	24.8	517.0	606.5	247.2	34.6	1.000116
27500.0	352.4	-31.5	27.7	508.8	604.8	246.9	35.8	1.000114
28000.0	344.5	-32.2	30.7	500.8	603.2	246.7	36.8	1.000112
28500.0	337.5	-34.6	33.7	492.9	601.5	248.1	37.0	1.000110
29000.0	330.3	-35.5	31.2	485.1	599.8	249.4	37.4	1.000109
29500.0	323.1	-37.3	42.5	477.2	598.1	250.3	38.2	1.000107
30000.0	316.1	-38.6	47.8	469.5	596.4	250.9	39.0	1.000105
30500.0	309.2	-39.5	50.7	461.8	594.7	251.0	39.8	1.000103
31000.0	302.3	-41.1	50.1	453.9	593.2	251.1	40.4	1.000102
31500.0	295.7	-42.3	45.4	446.2	591.6	251.3	40.8	1.000100
32000.0	289.0	-43.6	46.6**	438.6	590.0	251.3	41.6	1.000098
32500.0	282.4	-44.9	41.0**	431.0	588.3	251.3	42.6	1.000096
33000.0	276.0	-46.2	35.5**	423.6	586.6	251.4	44.1	1.000095
33500.0	269.7	-47.5	29.5**	416.3	585.0	251.4	45.8	1.000093
34000.0	263.5	-48.8	24.4**	409.2	583.3	251.5	47.4	1.000091

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4940.00 FEET MSL
6 MAY 70 0645 HRS MDT
ASCENSION NO. 222

UPPER AIR DATA
1260040225
STALLION

WSTM SITE COORDINATES
403783.00 FEET E
701402.00 FEET N

TABLE X (Cont)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SCUND KNOTS	DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
34500.0	257.5	-50.1	16.5**	402.2	581.6	251.4	49.4	1.000090
35000.0	251.6	-51.4	13.3**	395.3	579.9	250.5	52.3	1.000088
35500.0	245.9	-52.7	7.8**	388.5	578.2	250.0	54.6	1.000087
36000.0	240.2	-54.0	2.3**	381.9	576.5	250.2	56.0	1.000085
36500.0	234.6	-55.2		375.1	574.8	250.7	57.7	1.000084
37000.0	229.0	-56.4		368.2	573.2	251.5	59.6	1.000082
37500.0	223.6	-57.6		361.4	571.7	252.7	60.5	1.000080
38000.0	218.2	-58.8		354.7	570.1	254.3	60.4	1.000079
38500.0	213.0	-60.0		348.2	568.5	256.1	60.0	1.000078
39000.0	207.9	-61.2		341.8	566.9	257.9	59.5	1.000076
39500.0	203.0	-62.4		335.6	565.3	259.5	58.8	1.000075
40000.0	198.0	-63.6		327.9	564.8	260.9	58.1	1.000073
40500.0	193.2	-63.1		320.5	564.3	261.2	57.9	1.000071
41000.0	188.5	-63.5		313.2	563.8	259.7	58.6	1.000070
41500.0	183.5	-63.5		305.6	563.8	258.3	59.2	1.000068
42000.0	179.4	-63.5		298.2	563.8	257.3	59.0	1.000066
42500.0	175.0	-63.5		290.9	563.8	256.2	58.5	1.000065
43000.0	170.8	-63.5		283.8	563.8	254.7	59.0	1.000063
43500.0	166.6	-64.2		277.9	562.8	253.1	58.8	1.000062
44000.0	162.5	-64.4		271.2	562.6	252.3	56.2	1.000060
44500.0	158.5	-64.4		264.6	562.6	251.3	53.8	1.000059
45000.0	154.6	-64.4		258.1	562.6	247.9	53.7	1.000057
45500.0	150.5	-64.4		251.8	562.6	244.6	53.7	1.000056
46000.0	147.2	-64.4		245.6	562.6	242.3	54.2	1.000055
46500.0	143.5	-64.4		239.6	562.6	239.9	54.7	1.000053
47000.0	140.0	-64.7		234.0	562.2	240.3	53.4	1.000052
47500.0	136.6	-65.6		229.2	561.0	241.1	56.2	1.000051
48000.0	132.2	-66.0		224.0	560.5	242.6	56.0	1.000050
48500.0	130.0	-64.6		217.1	562.3	245.0	54.5	1.000048
49000.0	126.8	-63.2		210.4	564.1	247.1	52.9	1.000047

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

UPPER AIR DATA
126CC4C225
STALLION

STATION ALTITUDE 4540.00 FEET MSL
6 MAY 70 0645 FRS MDT
ASCENSION NC. 225

WSTM SITE COORDINATES
402182.00 FEET E
701403.00 FEET N

TABLE X (Cont)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL-HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SCUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
49500.0	123.7	-63.0		205.0	564.5	248.5	50.9	1.000046
50000.0	120.7	-63.1		200.1	564.4	249.8	49.1	1.000045
50500.0	117.7	-63.2		195.3	564.3	250.2	47.9	1.000043
51000.0	114.9	-63.3		190.6	564.1	250.7	46.8	1.000042
51500.0	112.1	-63.3		186.1	564.0	251.1	45.7	1.000041
52000.0	109.3	-63.4		181.6	563.9	251.6	44.6	1.000040
52500.0	106.7	-63.5		177.3	563.8	252.7	43.1	1.000039
53000.0	104.1	-63.6		173.0	563.6	253.9	41.5	1.000039
53500.0	101.5	-63.7		168.9	563.5	254.2	39.3	1.000038
54000.0	99.0	-63.8		164.8	563.4	253.8	36.6	1.000037
54500.0	96.6	-63.9		160.9	563.2	253.1	34.0	1.000036
55000.0	94.3	-64.0		157.0	563.1	251.4	31.7	1.000035
55500.0	92.0	-64.1		153.3	563.0	249.7	29.4	1.000034
56000.0	89.7	-64.2		149.6	562.8	249.9	27.2	1.000033
56500.0	87.5	-64.3		146.0	562.7	250.6	25.0	1.000033
57000.0	85.4	-64.5		142.2	563.2	250.6	22.5	1.000032
57500.0	83.3	-64.2		137.6	565.5	248.9	19.6	1.000031
58000.0	81.3	-62.4		134.3	565.3	247.1	16.7	1.000030
58500.0	79.3	-62.8		131.3	564.7	245.4	16.5	1.000029
59000.0	77.4	-63.3		128.4	564.1	243.8	16.7	1.000029
59500.0	75.5	-63.7		125.6	563.5	241.0	16.4	1.000028
60000.0	73.6	-64.1		122.8	562.9	237.3	15.5	1.000027
60500.0	71.8	-64.6		120.0	562.3	234.2	14.5	1.000027
61000.0	70.1	-63.7		116.6	563.5	235.3	12.6	1.000026
61500.0	68.4	-61.6		112.6	566.4	236.4	10.7	1.000025
62000.0	66.7	-61.1		109.7	567.0	258.0	7.8	1.000024
62500.0	65.1	-61.1		107.0	567.0	284.7	4.6	1.000024
63000.0	63.6	-61.1		104.4	567.0	309.4	2.9	1.000023
63500.0	62.0	-61.1		101.9	567.0	331.3	3.3	1.000023
64000.0	60.5	-60.5		99.4	567.3	353.3	3.7	1.000022

UPPER AIR DATA
1260040225
STALLION

STATION ALTITUDE 4940.00 FEET MSL
6 MAY 70 0645 MRS RDT
ASCENSION NO. 225

WSTM SITE COORDINATES
403783.00 FEET E
701403.00 FEET N

TABLE X (Cont)

GEOMETRIC ALTITUDE PSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SCUND KNOTS	WIND DIRECTION DEGREES(TA)	SPEED KNOTS	INDEX OF REFRACTION
64500.0	55.1	-60.6		56.9	567.6	338.2	5.2	1.000022
65000.0	57.7	-60.4		94.5	568.0	323.0	6.6	1.000021
65500.0	56.3	-60.2		92.1	568.3	312.7	6.9	1.000021
66000.0	55.0	-59.9		89.8	568.6	306.1	6.2	1.000020
66500.0	53.6	-59.7		87.5	568.9	299.4	5.5	1.000019
67000.0	52.4	-59.4		85.4	569.2	291.5	4.9	1.000019
67500.0	51.1	-59.2		83.2	569.5	283.6	4.3	1.000019
68000.0	49.9	-59.0		81.1	569.8	269.9	3.7	1.000018
68500.0	48.7	-58.7		79.1	570.2	248.2	3.2	1.000018
69000.0	47.5	-58.5		77.1	570.5	226.6	2.6	1.000017
69500.0	46.4	-58.1		75.2	571.0	212.6	2.3	1.000017
70000.0	45.3	-57.8		73.3	571.5	216.7	2.8	1.000016
70500.0	44.2	-57.4		71.4	571.9	220.8	3.2	1.000016
71000.0	43.2	-57.1		69.6	572.4	224.9	3.7	1.000015
71500.0	42.2	-56.7		67.9	572.8	222.8	4.2	1.000015
72000.0	41.2	-56.4		66.2	573.3	220.5	4.7	1.000015
72500.0	40.2	-56.0		64.5	573.7	218.3	5.2	1.000014
73000.0	39.2	-55.7		62.9	574.2	222.5	5.3	1.000014
73500.0	38.3	-55.8		61.4	574.1	230.2	5.2	1.000014
74000.0	37.4	-56.0		60.0	573.8	238.0	5.1	1.000013
74500.0	36.5	-55.8		58.6	574.0	260.3	4.8	1.000013
75000.0	35.7	-55.3		57.1	574.7	316.6	4.2	1.000013
75500.0	34.9	-54.8		55.6	575.3	12.8	3.5	1.000012
76000.0	34.1	-54.3		54.2	576.0	63.2	3.3	1.000012
76500.0	33.3	-53.8		52.8	576.6	61.4	7.0	1.000012
77000.0	32.5	-53.3		51.5	577.3	59.6	10.6	1.000011
77500.0	31.7	-52.8		50.2	578.0	59.2	14.2	1.000011
78000.0	31.0	-52.3		48.9	578.6	63.2	17.9	1.000011
78500.0	30.3	-51.8		47.7	579.3	67.3	21.6	1.000011
79000.0	29.6	-51.3		46.5	579.9	69.7	23.0	1.000010

STATION ALTITUDE 4540.00 FEET MSL
 6 DAY TC 0645 HRS MDT
 ASCENSION NC. 225
 UPPER AIF DATA
 1260C40225
 STALLION
 WSTM SITE COORDINATES
 403783.00 FEET E
 701403.00 FEET N

TABLE X (Cont)

GEOMETRIC ALTITUDE PSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CM ³ METER	SPEED OF SCUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
75000.0	28.5	-50.8		45.3	580.6	70.8	22.6	1.000010
80000.0	28.2	-50.1		44.1	581.5	71.9	22.3	1.000010
85000.0	27.6	-49.4		43.0	582.4	72.7	21.0	1.000010
90000.0	27.0	-48.8		41.9	583.3	73.3	19.6	1.000005
95000.0	26.3	-48.1		40.8	584.1	73.8	18.1	1.000005
100000.0	25.7	-47.5		39.8	584.9	73.5	16.2	1.000005
105000.0	25.2	-47.0		38.8	585.6	73.2	14.4	1.000005
110000.0	24.6	-46.5		37.8	586.3	72.8	13.3	1.000008
115000.0	24.1	-46.0		36.9	586.9	72.4	13.9	1.000008
120000.0	23.5	-45.4		36.0	587.6	71.9	14.4	1.000008
125000.0	23.0	-44.9		35.1	588.2	70.0	17.5	1.000008
130000.0	22.5	-44.4		34.2	588.9	66.9	22.5	1.000008
135000.0	22.0	-43.9		33.4	589.5	63.8	27.6	1.000007
140000.0	21.5	-43.4		32.6	590.2	66.5	25.0	1.000007
145000.0	21.0	-42.9		31.8	590.8	71.4	19.7	1.000007
150000.0	20.5	-42.2		31.1	590.4	76.3	14.3	1.000007
155000.0	20.1	-41.5		30.5	590.0	75.7	11.6	1.000007
160000.0	19.6	-41.0		29.7	590.8	73.8	9.6	1.000007
165000.0	19.2	-40.2		29.0	591.8	71.9	7.5	1.000006
170000.0	18.8	-41.4		28.2	592.8	109.7	6.3	1.000006
175000.0	18.4	-40.6		27.5	593.8	155.7	5.2	1.000006
180000.0	18.0	-39.8		26.8	594.9	201.6	4.1	1.000006
185000.0	17.6	-38.3		26.1	596.7	165.9	6.8	1.000006
190000.0	17.2	-36.8		25.3	598.6	113.2	10.3	1.000006
195000.0	16.8	-36.5		24.8	599.0	60.5	13.8	1.000006
200000.0	16.5	-37.2		24.3	598.1	52.7	23.9	1.000005
205000.0	16.1	-38.0		23.9	597.1	56.1	58.1	1.000005
210000.0	15.6	-37.8		23.3	597.4	59.5	82.3	1.000005
215000.0	15.4	-37.2		22.8	598.1	57.8	69.0	1.000005
220000.0	15.1	-36.6		22.2	598.9	54.5	43.2	1.000005

UPPER AIR DATA
1260040225
STALLION

WSTM SITE COORDINATES
402782.00 FEET E
701402.00 FEET N

STATION ALTITUDE 4540.00 FEET MSL
6 MAY 76 0645 PRS MDT
ASCENSION NC. 225

TABLE X (Cont)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL.HLM. PERCENT	DENSITY GM/CM ³ METER	SPEED OF SCUND KNOTS	DIRECTION DEGREES(TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
54500.0	14.8	-36.0		21.7	599.6	51.1	17.4	1.000005
55000.0	14.4	-35.4		21.2	600.3	50.0	8.5	1.000005
55500.0	14.1	-34.8		20.7	601.1	50.0	6.9	1.000005
56000.0	13.8	-34.1		20.2	600.8	49.9	5.2	1.000005
56500.0	13.5	-33.5		19.9	599.7	15.0	18.5	1.000004
57000.0	13.2	-32.8		19.5	598.6	320.7	40.0	1.000004
57500.0	12.9	-32.6		19.2	597.6	266.3	61.5	1.000004
58000.0	12.7	-32.5		18.8	596.5	263.8	58.6	1.000004
58500.0	12.4	-32.0		18.4	595.9	297.2	38.6	1.000004
59000.0	12.1	-31.5		18.0	596.0	330.6	16.7	1.000004
59500.0	11.9	-31.8		17.6	596.1	346.5	10.1	1.000004
60000.0	11.6	-31.7		17.2	596.2	348.1	10.9	1.000004
60500.0	11.4	-31.7		16.9	596.3	349.7	11.7	1.000004
61000.0	11.1	-31.6		16.5	596.4	352.2	12.4	1.000004
61500.0	10.9	-31.5		16.1	596.5	355.6	13.1	1.000004
62000.0	10.6	-31.4		15.8	596.6	358.9	13.8	1.000004
62500.0	10.4	-31.3		15.4	596.7			1.000003
63000.0	10.2	-31.3		15.1	596.8			1.000003
63500.0	10.0	-31.2		14.8	596.9			1.000003
64000.0	9.7	-31.1		14.4	597.0			1.000003
64500.0	9.5	-31.0		14.1	597.1			1.000003
65000.0	9.3	-30.9		13.8	597.2			1.000003

STATION ALTITUDE 4940.00 FEET MSL
 6 MAY 70 0645 PRS MDT
 ASPEN, CO. 225
 MANCATORY LEVELS
 126CC40225
 STALLION
 WSTM SITE COORDINATES
 403783.00 FEET E
 701403.00 FEET N

TABLE X (Cont)

PRESSURE GEOPOTENTIAL		TEMPERATURE		REL. HUM. PERCENT	WIND DATA	
MILLIBARS	FEET	AIR DEGREES	DEWPOINT CENTIGRADE		DIRECTION DEGREES(TN)	SPEED KNOTS
850.0	4560.	5.7	-3.6	39.	348.0	6.2XX
800.0	4662.	14.8	-4.3	26.	265.3	14.1XX
750.0	4745.	12.3	-6.5	26.	197.4	21.9
700.0	4827.	7.7	-8.2	31.	199.5	23.2
650.0	4912.	2.4	-10.6	38.	192.4	21.0
600.0	4992.	-3.3	-13.8	44.	199.5	23.0
550.0	5068.	-8.4	-24.6	26.	224.4	30.0
500.0	5158.	-12.8	-30.0	22.	237.9	23.0
450.0	5253.	-19.4	-31.4	34.	247.1	23.4
400.0	5351.	-26.2	-37.8	33.	242.3	36.5
350.0	5459.	-32.3	-44.6	29.	246.7	36.1
300.0	5577.	-41.5	-48.1	50.	251.2	40.6
250.0	5706.	-51.7	-68.4	12.**	250.2	53.2
200.0	5849.	-62.6			260.3	58.4
175.0	6012.	-63.5			256.3	58.9
150.0	6186.	-64.4			244.1	53.8
125.0	6361.	-62.9			247.9	51.8
100.0	6540.	-63.8			253.9	37.7
80.0	6722.	-62.7			246.1	16.4
70.0	6839.	-63.6			235.3	12.5
60.0	6977.	-60.8			348.1	4.2
50.0	7114.	-59.0			272.7	3.8
40.0	7237.	-56.0			217.9	5.3
30.0	7385.	-51.6			68.7	22.9
25.0	7508.	-46.8			73.1	13.9
20.0	7721.	-43.6			75.4	11.3
15.0	7962.	-36.5			53.8	37.8
10.0	8262.	-38.2				

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

XX WIND DATA MAY BE INVALID DUE TO MISSING FAW AZIMUTH AND ELEVATION ANGLES.

UNCLASSIFIED

Security Classification

DOCUMENT CONTROL DATA - R & D

(Security classification of title, body of abstract and indexing annotation must be entered when the overall report is classified)

1. ORIGINATING ACTIVITY (Corporate author) U. S. Army Electronics Command Ft. Monmouth, New Jersey		2a. REPORT SECURITY CLASSIFICATION UNCLASSIFIED	
		2b. GROUP	
3. REPORT TITLE AF03702 Honest John, Missile No. 620, Round No. 602 AML DR-524			
4. DESCRIPTIVE NOTES (Type of report and inclusive dates)			
5. AUTHORSHIP (First name, middle initial, last name) Meteorological Support Technical Area			
6. REPORT DATE May 1970		7a. TOTAL NO. OF PAGES 26	7b. NO. OF REFS 0
8a. CONTRACT OR GRANT NO.		8b. ORIGINATOR'S REPORT NUMBER(S)	
a. PROJECT NO.		DR-524	
c. DA Task 1T665702D127-02		8c. OTHER REPORT NUM (Any other numbers that may be assigned this report)	
d.			
10. DISTRIBUTION STATEMENT This document is subject to special export controls and each transmittal to foreign governments or foreign nationals may be made only with prior approval of Atmospheric Sciences Office White Sands Missile Range, New Mexico.			
11. SUPPLEMENTARY NOTES		12. SPONSORING MILITARY ACTIVITY	
13. ABSTRACT Meteorological data gathered for the launching of AF03702 Honest John, Missile Number 620, Round Number 602 AML, are presented in tabular form.			

DD FORM 1473

REPLACES DD FORM 1473, 1 JAN 64, WHICH IS OBSOLETE FOR ARMY USE.

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